



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,057	01/22/2002	Frederick S.M. Herz	REFH-0153	3878

23377 7590 09/13/2010
WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

AKINTOLA, OLABODE

ART UNIT	PAPER NUMBER
----------	--------------

3691

MAIL DATE	DELIVERY MODE
-----------	---------------

09/13/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/054,057	Applicant(s) HERZ ET AL.	
	Examiner OLABODE AKINTOLA	Art Unit 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3691

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wuthrich et al.

Re claim 2: Wuthrich teaches a method of predicting stock market behavior using software implemented on a processor, said trading software having a data analysis tool implementing natural language processing and a stock predictor implementing a stock prediction model, said method comprising:

said data analysis tool extracting information from news media relating to a particular *stock market* to create a template including natural language text describing activities or announcements of said particular *stock market*;

Art Unit: 3691

said data analysis tool relating changes in stock *index* of said particular *stock market* to information stored in said template about said particular *stock market*;
said data analysis tool determining a statistical significance of said changes in stock *index* of said particular *stock market* based on said information; and
said stock predictor predicting changes in *index* of said particular *stock market* based on new information about said particular *stock market* if information of the type included in the new information has in the past caused a statistically significant change in the stock *index* in said particular *stock market* (see at least abstract, “prediction techniques” on pages 2721-2722 and Tables 1, 2 and 3).

Wuthrich does not explicitly teach the predicting changes in price as applied to individual stock or publicly traded company as recited in the claim. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wuthrich's principle operations or prediction model to individual stock or traded company because the Wuthrich reference is in the field of applicant's endeavor and it solves the same problem with which the applicant was concerned, albeit using different parameters (i.e., stock market and its index instead of publicly traded company and its stock price). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

Re claim 3: Wuthrich teaches clustering the information of said particular *stock market* with information of another *stock market* whose *index* has been shown to be similarly affected by similar information as included in said new information (tables 1 and 2).

Art Unit: 3691

Re claim 4: Wuthrich teaches wherein said information extracting step comprises said data analysis tool using natural language processing to parse sources of said information for information about said particular *stock market*, said data analysis tool further standardizing different references to the particular *stock market* by different proper names, co-referencing when the particular publicly traded company is referred to by pronouns, adding said new information to said template, and adding additional information about said particular publicly traded company to said template using databases and/or derived values (see entire document).

Re claim 5: Wuthrich teaches comprising the said data analysis tool further steps of clustering templates containing information about different *stock markets* into similar cluster groups, determining changes in index at different intervals for different *markets* in a cluster group in response to comparable information, and estimating the statistical probability of a change in the *index* of said particular *stock market* in response to certain new information statistically correlated to that in said comparable information (see entire document).

Re claim 6: Wuthrich teaches conducting a stock trade based on said predicted changes in index (page 2724, lines 1-13).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLABODE AKINTOLA whose telephone number is (571)272-3629. The examiner can normally be reached on M-F 8:30AM -5:00PM.

Art Unit: 3691

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Olabode Akintola/
Primary Examiner, Art Unit 3691